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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/532,212

04/22/2005

Yasuhisa Yamada

XA-10323

6753

181 7590 02/07/2007

MILES & STOCKBRIDGE PC  
1751 PINNACLE DRIVE  
SUITE 500  
MCLEAN, VA 22102-3833

EXAMINER

COKER, ROBERT A

ART UNIT

PAPER NUMBER

3616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/07/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/532,212

Applicant(s)

YAMADA, YASUHISA

Examiner

Robert A. Coker

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 December 2005 (Preliminary Amendment).
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 04/22/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 7 lines 11-12, "at least one said groove" is lacking antecedent basis. Note that "at least one set of grooves" is claimed in line 7. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 7-9, 12 and 15 are rejected under 35 U.S.C. 102(e) as being unpatentable by Castellon (U.S. 6,557,433).

With respect to claim 7, Castellon discloses a telescopic shaft for vehicle steering which is installed in a steering shaft of a vehicle and in which a male shaft (11) and a female shaft (10) are fitted to each other to be capable of transmitting torque therebetween and moving in an axial direction, characterized in that torque transmitting

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member(s) (27) is (are) interposed between at least one set of grooves (13, 17) formed on an outer peripheral surface of said male shaft and on an inner peripheral surface of said female shaft to be extended the axial direction to face each other; and a projection (26) which is fitted in at least one said groove extended in the axial direction of said female shaft through a gap is formed on the outer peripheral surface of said male shaft.

With respect to claims 8, Castellon discloses a telescopic shaft for vehicle steering, wherein said projection is formed coaxially with one said grooves extended in the axial direction of said male shaft.

With respect to claim 9, Castellon discloses a telescopic shaft for vehicle steering, wherein the number of said torque transmitting member(s) in the circumferential direction is the same as the number of said projections in the circumferential direction.

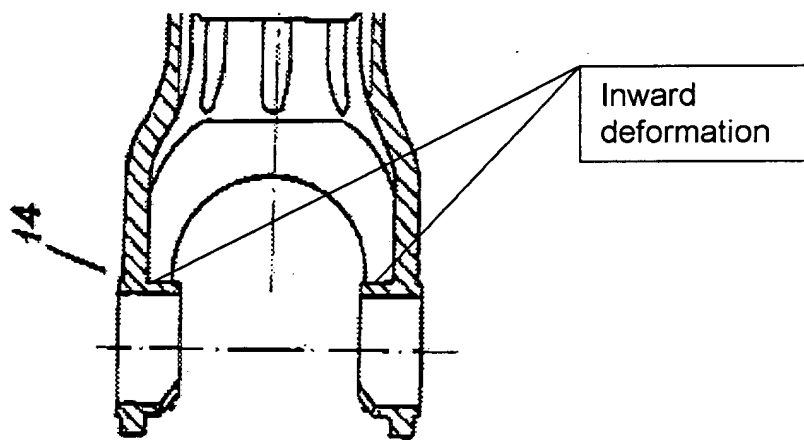


Figure A

With respect to claims 10 and 13, Castellon discloses a telescopic shaft for a vehicle steering, wherein said female shaft comprises at an end thereof an inward

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deformation portion, which is deformed inward (See Figure A above, the lower part of female shaft).

With respect to claims 12 and 15, Castellon discloses a telescopic shaft for vehicle steering; wherein said torque transmitting member(s) comprises at least one columnar body (27).

3. Claims 7-9, 11 and 14 are rejected under 35 U.S.C. 102(e) as being unpatentable by Duval et al., (U.S. 6,343,993).

With respect to claim 7, Duval et al., discloses a telescopic shaft for vehicle steering which is installed in a steering shaft of a vehicle and in which a male shaft (1) and a female shaft (2) are fitted to each other to be capable of transmitting torque therebetween and moving in an axial direction, characterized in that torque transmitting member(s) (3) is (are) interposed between at least one set of grooves (Figure 12, Items 141, 142) formed on an outer peripheral surface of said male shaft and on an inner peripheral surface of said female shaft to be extended the axial direction to face each other; and a projection (Figure 12, Item 34) which is fitted in at least one said groove (Figure 12, Items 35, 38, 142) extended in the axial direction of said female shaft through a gap is formed on the outer peripheral surface of said male shaft.

With respect to claim 8, Duval et al., disclose a telescopic shaft for vehicle steering, wherein said projection is formed coaxially with one said grooves extended in the axial direction of said male shaft.

With respect to claim 9, Duval et al., discloses a telescopic shaft for vehicle steering, wherein the number of said torque transmitting member(s) in the

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circumferential direction is the same as the number of said projections in the circumferential direction.

With respect to claims 11 and 14, Duval et al., discloses a telescopic shaft for vehicle steering, wherein said torque transmitting member comprises at least one set of spherical body (3).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Brown (U.S. 4,357,137) and Budaker et al., (U.S. 6,035,740) disclose telescopic shafts.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert A. Coker whose telephone number is 571-272-8514. The examiner can normally be reached on 8:30-5:00 Monday thru Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

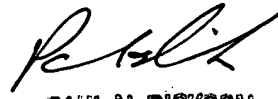
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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Robert A Coker  
Examiner  
Art Unit 3616

 2/5/07  
PAUL N. DICKSON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600